

IN THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A game machine system comprising a set top box (STB) device including means for receiving a digital television satellite broadcast signal and for supplying television program data corresponding to the received digital television satellite broadcast signal to a display device, the STB device including a server device information processing means and drive means, the game machine system also comprising the display device and a game executing device configured as a game controller without means for storing game software on a driven storage medium, the STB device, the display device, and the game executing device being connected to each other to form the game machine system via a digital communication line that is completely external to each of the STB device, the display device, and the game executing device, said ~~server device included in the STB~~ game machine system further comprising[[:]],

~~an information storage unit having a drive means for storing game software information including a game control program and display data used to form a game screen in accordance with said game control program~~[[:]]

~~game software information acquisition means for acquiring said game software information which is provided by means of broadcasting or via a dedicated communication line and storing the acquired game software information in said information storage unit; and~~

~~information transmitting means for reading necessary information from said information storage unit in response to a request received via said digital communication line and transmitting said information over said digital communication line[.,]]~~
~~said game executing device being configured as a game controller without storage means for storing game software and further comprising[[:]]~~

game selection command input means in said game executing device for inputting a game selection command to select a specified game from a remote game software provider;

a game selection request transmission means in said game executing device for transmitting[.,]] ~~over said digital communication line, an information request for providing necessary information in accordance with the game control program specified by said game selection command input via~~ to said remote game software provider via a communications media separate from the completely external digital communication line, said remote game software provider including means for receiving said game selection request via the communications media separate from the completely external digital communication line and means for transmitting said specified game indicated by said game selection command input means to said STB device as part of said digital television broadcast signal;

~~game control command input means for inputting a game control command[[:]]~~

said STB device including game software information acquisition means for acquiring necessary said game software information from the specified game

transmission by the remote game provider transmitting means and for storing the acquired game software information received via said digital communication line; and corresponding to said specified game in said drive means;

game control command input means in said game executing device for inputting a game control command;

information request transmission means in said game executing device for transmitting a game request corresponding to said game control command from said game executing device to said STB device over said completely external digital communication line for commanding said information processing means in said STB device to provide the specified game information from said drive means to said game executing device over said completely external digital communication line;

information acquisition means in said game executing device for acquiring said transmitted specified game information from said information processing means in said STB device via said completely external digital communication line;

image information generating means in said game executing device for generating an image information in accordance with game display data included in said specified game information acquired via said information acquisition means and transmitting the generated image information representing the generated image over said completely external digital communication line to said display device;
said display device comprising[[:]]

image information acquisition means in said display device for acquiring the image information representing the generated image information transmitted via said completely external digital communication line; and

image displaying means in said display device for displaying an image in according with the generated image information acquired via said image information acquisition means.

2. (Currently Amended) A game machine system according to Claim 1, wherein said image information acquisition means of said display device ~~is capable of acquiring~~ acquires data-compressed image information transmitted from said information processing means in said STB ~~included server~~ device over said completely exterior digital communication line and also the generated image information ~~generated~~[[,]] data-compressed by said image information generating means[[,]]~~and transmitted over~~ from said completely exterior digital communication line ~~by said game executing device,~~

and said display device further comprises:

decompression means for decompressing the data-compressed image information acquired by said image information acquisition means from said information processing means in said STB device and from said image information generating means; and

image synthesizing means for synthesizing an image from the image represented by the image information which has been ~~received from said server device and then~~ decompressed by said decompression means ~~and the image represented by the image~~

~~information which has been generated by said game executing device and then decompressed by said decompression means.~~

3. (Currently Amended) A game machine system according to Claim 1, wherein said information processing means ~~server device~~ included in the STB device further comprises:

additional information acquisition means for acquiring additional information associated with ~~selectable~~ information used in a particular game and storing said additional information in said ~~information storage unit~~ drive means, said additional information being supplied by means of broadcasting or via a dedicated communication line; and

additional information processing and transmission means for reading ~~the information~~ ~~acquired as~~ said additional information from said drive means in response to an additional information providing request received via said completely exterior digital communication line and then transmitting said additional information read from said drive means over said completely exterior digital communication line instead of ~~the~~ original information used in the particular game;

said game executing device further comprising:

additional information selection command input means for inputting an additional information selection command specifying the additional information to be used instead of ~~the~~ original ~~selectable~~ information used in the particular game; and

additional information request transmission means for transmitting a request for the additional information specified by said additional information selection command input

via said additional information selection command input means, over said completely exterior digital communication line.

4. (Currently Amended) A game machine system according to Claim 1, wherein ~~one of~~ devices connected to said digital communication line includes ~~the communications media~~ includes a communication line connecting means for connecting a communication line with a the remote game software information provider ~~in response to a command issued by a user; and~~ ~~information request transmission means for transmitting, in response to a command~~ ~~issued by the user, a request for desired information to said game software information provider~~ ~~via the communication line connected by said communication line connecting means.~~

5. (Currently Amended) A game machine system according to Claim 1, wherein one of the devices connected to said completely exterior digital communication line includes:

a usage history information storage unit for storing information about the history of usage of games; and

usage history information updating means for updating said information about the history of usage of games stored in said usage history information storage unit, when said game selection ~~command~~ request transmission means of said game executing device has transmitted said game selection command,

thereby making it possible to perform accounting in accordance with the usage history information stored in said usage history information storage unit.

6. (Currently Amended) A game machine system according to Claim 5, wherein ~~one of~~ ~~devices connected to said digital communication line includes~~ the communications media includes a communication line connecting means for connecting a communication line with said remote game software information provider in response to a command issued by a user and the game machine system further includes usage history information transmission means for transmitting said usage history information stored in said usage history information storage unit via said communication line, at a scheduled time or in response to a usage history information transmission request transmitted from said remote game software information provider via said communication line.

7. (Currently Amended) A game machine system according to Claim 1, wherein said completely exterior digital communication line includes a digital serial bus.

8. (Currently Amended) A game machine system according to Claim 1, wherein said completely exterior digital communication line includes a wireless communication channel.

9. (Currently Amended) A set top box (STB) ~~server device in an STB~~ including means for receiving a digital television satellite broadcast signal and for supplying television program data corresponding to the received digital television satellite broadcast signal to a display device, said STB device, the display device, and a game executing device being connected to each other via a digital communication line that is completely external to each of the STB

device, the display device, and the game executing device to form a game machine system, said STB ~~server~~ device further comprising:

an information storage unit having a drive means for storing game software information including a game control program and display data used to form a game screen in accordance with said game control program;

game software information acquisition means for acquiring said game software information which is provided by means of broadcasting or via a dedicated communication line from a remote game software provider and for storing the acquired game software information in said information storage unit; and

information processing and transmitting means for reading ~~necessary~~ game information from said information storage unit in response to a request received via said completely external digital communication line and transmitting said information over said completely external digital communication line to the game executing device.

10. (Currently Amended) An STB ~~server~~ device according to Claim 9, further comprising:

additional information acquisition means for acquiring additional information associated with ~~selectable~~ information used in a particular game and storing said additional information in said information storage unit, said additional information being supplied by means of broadcasting or via a dedicated communication line; and

additional information processing and transmission means for reading the information acquired as said additional information from said information storage unit in response to an

additional information providing request received via said completely exterior digital communication line and then transmitting said information over said completely exterior digital communication line to said game executing device instead of the ~~original~~ game information used in the particular game.

11. (Currently Amended) An STB ~~server~~ device according to Claim 9, further comprising:

communication line connecting means for connecting a communication line with a said remote game software ~~information~~ provider in response to a command issued by a user; and

information request transmission means for transmitting, in response to a the command issued by the user, a request for ~~desired~~ said game software information to said remote game software ~~information~~ provider via the communication line connected by said communication line connecting means.

12. (Currently Amended) An STB ~~server~~ device according to Claim 9, further comprising:

a usage history information storage unit for storing information about the history of usage of games; and

usage history information updating means for updating said information about the history of usage of games stored in said usage history information storage unit, when said request is received via said completely external digital communication line ~~game selection~~

~~command transmission means of said game executing device has transmitted said game selection command over said digital communication line,~~

thereby making it possible to perform accounting in accordance with the usage history information stored in said usage history information storage unit.

13. (Currently Amended) An STB ~~server~~ device according to Claim 12, further comprising:

communication line connecting means for connecting a communication line with a said remote game software information provider in response to a command issued by a user; and

usage history information transmission means for transmitting said usage history information stored in said usage history information storage unit via said communication line, at a scheduled time or in response to a usage history information transmission request transmitted from said remote game software information provider via said communication line.

14. (Currently Amended) A game executing device in a game machine system comprising ~~a server device having~~ a drive means for storing game software included as part of a set top box (STB)[[,]] ~~the STB~~ device including means for receiving a digital television satellite broadcast signal and for supplying television program data corresponding to the received digital television satellite broadcast signal to a display device, said game executing device, said display device, and said STB device being connected to each other via a digital communication line that is completely external to each of the STB device, the display device,

and the game executing device, said game executing device being configured as a game controller without drive storage means for storing game software and further comprising:

game selection command input means for inputting a game selection command to select a specified game from a remote game software provider;

a game selection request transmission means for transmitting~~[[,]] over said digital communication line~~, a game selection request for selection of the game specified by said game selection command ~~input via~~ to said remote game software provider via a communications media separate from the completely external digital communication line;

game control command input means for inputting a game control command to select the specified game;

information request transmission means for transmitting the game control command~~[[,]]~~ over said completely exterior digital communication line~~[[,]]~~ ~~an information~~ to the STB device as a request for providing necessary information in accordance with the specified game control program specified by said game selection command and in accordance with the game control command input via said game control command input means from the STB device;

information acquisition means for acquiring ~~necessary information~~ the specified game from information received via said completely exterior digital communication line; and

image information generation means for generating ~~an~~ image information in accordance with game display data included in said specified game ~~information~~ acquired via said information acquisition means and transmitting the generated image information ~~representing the generated image~~ over said completely external digital communication line to the display device.

15. (Currently Amended) A game executing device according to Claim 14, further comprising:

additional information selection command input means for inputting an additional information selection command specifying additional information to be used instead of ~~selectable~~ information used in a particular game; and

additional information request transmission means for transmitting a request for additional information specified by said additional information selection command input via said additional information selection command input means, over said completely exterior digital communication line.

16. (Currently Amended) A game executing device according to Claim 14, further comprising:

communication line connecting means for connecting a communication line with a the remote game software ~~information~~ provider in response to a command issued by a user; and

information request transmission means for transmitting, in response to a the command issued by the user, a request for ~~desired information~~ the specified game to said remote game software ~~information~~ provider via the communication line connected by said communication line connecting means.

17. (Currently Amended) A game executing device according to Claim 14, further comprising:

a usage history information storage unit for storing information about the history of usage of games; and

usage history information updating means for updating said information about the history of usage of games stored in said usage history information storage unit, when said request for providing the specified game is received via said completely external digital communication line ~~game selection command transmission means of said game executing device has transmitted said game selection command over said digital communication line,~~

thereby making it possible to perform accounting in accordance with the usage history information stored in said usage history information storage unit.

18. (Currently Amended) A game executing device according to Claim 17, further comprising:

communication line connecting means for connecting a communication line with a said remote game software information provider in response to a command issued by a user; and

usage history information transmission means for transmitting said usage history information stored in said usage history information storage unit via said communication line, at a scheduled time or in response to a usage history information transmission request transmitted from said remote game software information ~~information~~ provider via said communication line.

19. (Currently Amended) A display device in a game machine system comprising a ~~server device having a drive~~ means for storing game software included as part of a set top box (STB)[[.]] ~~said STB~~ device including means for receiving a digital television satellite broadcast

signal and for supplying television program data corresponding to the received digital television satellite broadcast signal to said display device, a game executing device being configured as a game controller without drive storage means for storing game software, said game executing device, said display device, and said STB device being connected to each other via a digital communication line that is completely external to each of the STB device, the display device, and the game executing device, said display device comprising:

image information acquisition means for acquiring data-compressed image information transmitted from said ~~server~~ STB device over said completely external digital communication line and also image information generated, data-compressed, and transmitted over said completely external digital communication line by said game executing device;

decompression means for decompressing the data-compressed image information acquired by said image information acquisition means from said STB device and from said game executing device;

image synthesizing means for synthesizing an image from the data-compressed image ~~represented by the image information which has been received from said server device and then decompressed by said decompression means and the image represented by the image information which has been generated by said game executing device and then decompressed~~ by said decompression means; and

image displaying means for displaying the image synthesized by said image synthesizing means.

20. (Currently Amended) A display device according to Claim 19, further comprising:

communication line connecting means for connecting a communication line with a game software ~~information~~ provider in response to a command issued by a user; and

information request transmission means for transmitting, in response to a the command issued by the user, a request for ~~desired information~~ a specified game to said game software ~~information~~ provider via the communication line connected by said communication line connecting means.

21. (Currently Amended) A display device according to Claim 19, further comprising:
a usage history information storage unit for storing information about the history of usage of games;

usage history information updating means for updating said information about the history of usage of games stored in said usage history information storage unit, when said a game selection command transmission means of said game executing device has transmitted said a game selection command ~~over said digital communication line~~,

thereby making it possible to perform accounting in accordance with the usage history information stored in said usage history information storage unit.

22. (Currently Amended) A display device according to Claim 21, further comprising:
communication line connecting means for connecting a communication line with a game software ~~information~~ provider; and

usage history information transmission means for transmitting said usage history information stored in said usage history information storage unit via said communication line,

at a scheduled time or in response to a usage history information transmission request transmitted from said game software ~~information~~ provider via said communication line.

23. (Currently Amended) A method of using a game using a game machine system comprising ~~a server device having~~ providing a drive means for storing game software ~~included~~ as part of a set top box (STB)~~[[,]] the STB device~~, receiving a digital television satellite broadcast signal using the STB device and supplying television program data corresponding to the received digital television satellite broadcast signal from the STP device to a display device, providing a game executing device ~~being~~ configured as a game controller without drive storage means for storing game software, connecting said display device, said game executing device, and said STB device ~~being connected~~ to each other via a digital communication line that is completely external to each of the STB device, the display device, and the game executing device, said method further comprising~~[[:]]~~ steps of:

~~a game software information acquisition step in which said STB included server device~~ acquires acquiring game software information supplied via broadcasting or a dedicated communication line using the STB device in response to a request from the game executing device; and stores

storing the acquired game software information ~~in an information storage unit~~ using the drive means of said STB ~~included server~~ device, said acquired game software information including a game control program and game displaying data used to form a game screen in accordance with said game control program;

~~an information transmission step in which said STB included server device reads~~
~~necessary~~ reading the game software information acquired in the acquisition step from said
~~information storage unit~~ STB device drive means in response to a request received from the
game executing device via said completely external digital communication line; and

transmitting said game software information over said completely external digital
communication line to said game executing device;

~~a game selection request transmission step in which said game executing device accepts~~
~~a game selection command issued by a user to select a specified game and transmits, over said~~
~~digital communication line, a game selection request for selection of the game specified by~~
~~said game selection command~~[[;]]

~~an information request transmission step in which said game executing device accepts~~
~~a game control command issued by the user and transmits, over said digital communication line,~~
~~a request for providing necessary information in accordance with the game control program~~
~~specified by said game selection command and in accordance with said game control command~~
~~accepted via game control command input means~~[[;]]

~~an information acquisition step in which said game executing device acquires necessary~~
~~information from information received via said digital communication line~~[[;]]

~~an image generation step in which said game executing device~~ receiving said game
software information transmitted over said completely external digital communication line at
the game executing device and generates an generating image information in accordance with
game display data included in said game software information ~~acquired in said information~~
~~acquisition step at the game executing device;~~

~~and transmits~~ transmitting the image information representing the generated image information over said completely external digital communication line to said image display device from said game executing device;

~~an image information acquisition step in which said image display device acquires~~ acquiring image information transmitted via said digital communication line at said image display device; and

~~an image displaying step in which said image display device displays an image in~~ according with the image information acquired in said image information ~~acquisition~~ acquiring step.

24. (Currently Amended) A method of using a game according to Claim 23, wherein said image information ~~acquisition~~ acquiring step performed by said display device acquires data-compressed image information transmitted from said STB ~~included server~~ device over said completely exterior digital communication line and also acquires image information generated, data-compressed, and transmitted over said completely exterior digital communication line by said game executing device;

and wherein the method further comprises the steps of:

decompressing the data-compressed image information acquired in said image information ~~acquisition~~ acquiring step; and

synthesizing an image from the ~~image represented by the image information which has been received from said server device and then~~ decompressed data-compressed image information in said ~~decompression step and the image represented by the image information~~

~~which has been generated by said game executing device and then decompressed in said decompression step.~~

25. (Currently Amended) A method of using a game according to Claim 23, further comprising:

an additional information acquisition step in which said STB ~~included server~~ device acquires additional information associated with ~~selectable~~ information used in a particular game and storing said additional information in said ~~information storage unit~~ drive means, said additional information being supplied by means of broadcasting or via a dedicated communication line;

an additional information transmission step for reading the information acquired as said additional information in response to an additional information providing request received via said completely exterior digital communication line and then transmitting said information over said completely exterior digital communication line instead of the original information used in the particular game;

an additional information selection command input step in which said game executing device accepts an additional information selection command specifying additional information to be used instead of ~~selectable~~ information used in the particular game; and

an additional information request transmission step for transmitting a request for additional information specified by said additional information selection command accepted in said additional information selection command input step, over said completely exterior digital communication line.

26. (Currently Amended) A method of using a game according to Claim 23, further comprising:

a connection command acceptance step for accepting a connection command indicating that a communication line should be connected with a game software information provider;

a communication line connecting step for connecting a communication line with said game software information provider in response to said connection command accepted in said connection command acceptance step;

a command acceptance step for accepting a command indicating that a request for specified ~~information~~ game software should be transmitted to said game software information provider; and

an information request transmission step for transmitting, in response to said command accepted in said command acceptance step, a request for the specified information game software to said game software information provider via the communication line connected in said communication line connecting step.

27. (Currently Amended) A method of using a game according to Claim 26, further comprising:

an authentication step in which said game software information provider performs authentication when said game software information provider receives ~~an information~~ a game software providing request via said communication line connected in said communication line connecting step;

a requested information providing step for, if the sender of said game software ~~information~~ providing request is determined as an authorized user in said authentication step, supplying the requested game software information by means of broadcasting or via a dedicated communication line; and

an accounting step for performing an accounting process when a message indicating that the reception of the game software information is completed is received via said communication line connected in said communication line connecting step.

28. (Currently Amended) A method of using a game according to Claim 27, further comprising:

an information usage permission transmission step for, if the sender of said game software information providing request is determined as an authorized user in said authentication step, transmitting an information usage permission message indicating that the use of the requested game software information is permitted to said sender of said game software information providing request; and

an information usage permission message reception step in which said sender of said game software information providing request receives said information usage permission message transmitted from said game software information provider via said communication line connected in said communication line connected step.

29. (Currently Amended) A method of using a game according to Claim 23, further comprising a usage history information updating step for updating information stored in a usage

history information storage unit about the history of usage of the requested and selected game software information, when said ~~game-selection~~ request for the specified game software information is transmitted in said ~~game-selection~~ information request transmission step, thereby making it possible to perform accounting in accordance with the usage history information stored in said usage history information storage unit.

30. (Original) A method of using a game according to Claim 29, further comprising:
a communication line connecting step for connecting a communication line with said game software information provider; and
a usage history information transmission step for transmitting said usage history information stored in said usage history information storage unit via said communication line, at a scheduled time or in response to a usage history information transmission request transmitted from said game software information provider via said communication line.

31. (Currently Amended) A method of using a game according to Claim 23, wherein said completely exterior digital communication line includes a digital serial bus.

32. (Currently Amended) A method of using a game according to Claim 23, wherein said completely exterior digital communication line includes a wireless communication channel.